

*rel. 10/1/81*  
**What is claimed:**

1. A method of delivering a selected DNA sequence to the central nervous system of a mammal comprising administering a neurotropic viral vector capable of infecting the central nervous system of a mammal, said vector containing a selected DNA sequence, said sequence being operatively linked to a selected promoter.
2. The method of claim 1 wherein the selected promoter is the LAT promoter.
- 10 3. The method of claim 1 wherein the selected DNA sequence encodes  $\beta$ -glucuronidase.
4. The method of claim 1 wherein the selected DNA sequence encodes tyrosine hydroxylase.
5. The method of claim 1 wherein the viral vector  
15 comprises an HSV vector.
6. The method of claim 5 wherein the HSV vector comprises an HSV-1 strain.
7. The method of claim 6 wherein the HSV-1 strain comprises strain 17.
- 20 8. A method of delivering a DNA sequence encoding  $\beta$ -glucuronidase to the brain of a mammal comprising administering an HSV-1 vector containing a DNA sequence encoding  $\beta$ -glucuronidase operatively linked to a LAT promoter.  
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9. The method of claim 8 wherein the HSV-1 vector  
25 comprises HSV-1 strain 17.

**ABSTRACT**

The invention provides a method of delivering a selected DNA sequence to the central nervous system of a mammal by administering to said mammal a neurotropic virus, said virus  
5 containing a selected DNA sequence under the control of a promoter which permits expression of the DNA during the latent infectious state of the virus.